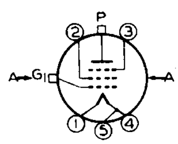
959

DETECTOR AMPLIFIER PENTODE

ACORN TYPE

Filament	Coated	
Voltage	1.25	d-c volts
Current	0.05	amp.
Direct Interelectrode Capacitances:		
Grid to Plate°	0.015 max.	μμf
Input	1.8	μμf
Output	2.5	μμf
Overall Length		1-11/16" ± 3/16"
Overall Diameter		1-3/32" ± 1/16"
Bulb	*See Outline in GENERAL SECTION*	T-4½
End Terminals		Two
Base		Small Radial 5-Pin ←
Pin 1 - Filament		P - Plate
Pin 2 - Grid No.2		G_1 - Grid No.1
Pin 3 - Grid No.3		AA' - Plane of Electrodes
Pin 4 - Filament -		
Pin 5 - Filament -		
RCA Socket		Stock No. 9925
RCA Grid & Plate Clips		Stock No. 9939
Mounting Position		Vertical◊



P is on Long Part of Bulb: Top
G_1 is on Short Part of Bulb: Bottom
BOTTOM VIEW (5BE)

Maximum Ratings are Design-Center Values

AMPLIFIER

D-C Plate Voltage	145 max.	volts ←
D-C Screen (Grid No.2) Voltage	67.5 max.	volts
Characteristics — Class A_1 Amplifier:		
D-C Plate Voltage	135	volts
Suppressor (Grid No.3)	Connected to filament(-) at socket	
D-C Screen Voltage	67.5	volts
D-C Grid (No.1) Voltage #	-3	volts
Plate Resistance	0.8 approx.	megohm
Transconductance	600	μmhos
D-C Plate Current	1.7	ma.
D-C Screen Current	0.4	ma.

° With shield baffle.

◊ Horizontal operation permitted if plane of electrodes is vertical (plate on edge).

Under maximum rated conditions, the resistance in the grid circuit should not exceed 0.1 megohm with fixed bias, or 0.5 megohm with cathode bias.

R-f grounding by means of condensers placed close to the tube terminals is required if the full capabilities of the 959 for ultra-high-frequency uses are to be obtained. It is important in the cases of the plate and control-grid circuits that separate r-f grounding returns be made to a common point in order to avoid r-f inter-action through common return circuits. It may also be advisable in some applications to supplement the action of the by-pass condensers by r-f chokes placed close to the condensers in the return or supply lead for the grid, the screen, the suppressor, the plate, and the filament.

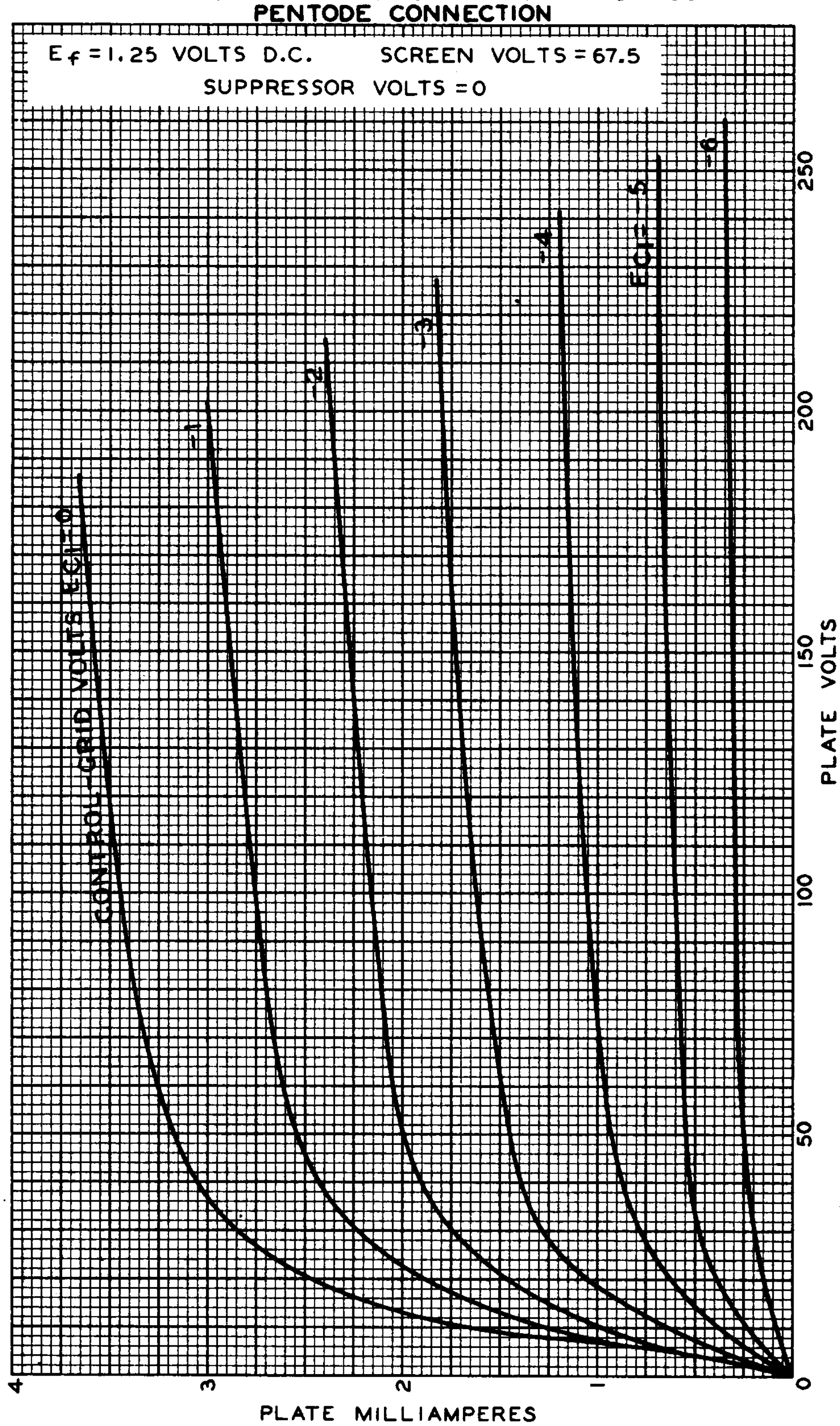
← Indicates a change.

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AVERAGE PLATE CHARACTERISTICS
PENTODE CONNECTION



JUNE 14, 1944

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92CM-6338R1